

**Official Amendment**

Serial No. 10/056,610

Docket : MIO 0051 V2/40509.183

**REMARKS**

By this response, claims 30, 32 and 40 have been amended. No new matter has been entered. Accordingly, claims 30, 32-34, 40-45 and 50-53 are pending in this application.

**Rejections Under 35 U.S.C. § 112**

By the above amendment to claim 32, the Applicant submits that the noted §112 rejected of the Office Action for failing to particularly point out and distinctly claim the subject matter which is regarded as the invention has been overcome. Withdrawal of this rejection is respectfully requested.

**Rejections Under 35 U.S.C. § 103(a)**

Claims 32-34, and 40-45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hegel in view of Juskey.

Claim 32, as amended, recites the limitation of a void which does not extend as far as said lower continuous conductive layer. Claim 40, as amended, recites the limitation that the void does not extend as far as the continuous lower conductive laminate layer.

In contrast, Hegel discloses plastic pin array packages that comprise a multilayer printed wiring board 10 with an array of pins 21 that extend completely through the printed wiring board 10 (Fig. 4; Col. 1, lines 6-9; Col. 4, lines 20-21). Juskey discloses that the anchor holes 150 extend through the entire substrate 160 to the lower solder mask 190 (Fig. 2). Therefore, neither Hegel nor Juskey disclose all the limitations of the claimed invention.

Nor does the hypothetical combination of Hegel and Juskey suggest or teach a void that extends only through the upper electrically conductive layer and the underlying resin laminate substrate and not through a lower electrically conductive layer to a lower solder mask. At best, the hypothetical combination of Hegel and Juskey teaches a void the extend through the resin laminate substrate and both conductive layers to the lower solder mask layer. Because the hypothetical combination of Hegel and Juskey does not suggest or teach all the limitations of the

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claimed invention as amended, Applicant asserts that claims 32 and 40 are patentable over Hegel in view of Juskey, and requests that the Examiner withdraw his rejection of claims 32 and 40.

Claims 33, 34, 41-45, 50, 52 and 53 depend upon the independent claims 32 and 40 either directly or ultimately. These dependent claims are patentable for the same reasons as presented above with respect to the claims from which they depend. Therefore, Applicant believes claims 33, 34, 41-45, 50, 52 and 53 are also patentable over the prior art and request the Examiner withdraw his rejection to claims 33, 34, 41-45, 50, 52 and 53.

Claim 45 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hegel in view of Juskey and further in view of Papathomas and Marrs. Applicant respectfully traverses this rejection. Claim 45 depends on independent claim 40. Applicant believes Claim 40 as amended is patentable over the prior art for the reasons stated above. Claim 45 is patentable for the same reasons as presented above with respect to claim 40 from which it depend. Therefore, Applicant asserts that claim 45 is also patentable over the prior art and requests that the Examiner withdraw his rejection of claim 45.

Claims 30, 32-34, 40-45 and 50-53 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 of U.S. Pat. No. 6,423,581. Accordingly, filed herewith is a terminal disclaimer, thereby overcoming this rejection.

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**CONCLUSION**

For the above reasons, the Applicant respectfully submits that the above claims represent allowable subject matter. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,  
DINSMORE & SHOHL LLP

By



William A. Jividen  
Registration No. 42,695

One Dayton Centre  
One South Main Street, Suite 1300  
Dayton, Ohio 45402-2023  
Telephone: (937) 449-6448  
Facsimile: (937) 449-6405

WAJ/das